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CERTIFICATE OF MAILING

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1/22/07  
Date

Kresta L. DeZwaan  
Kresta L. DeZwaan

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit	:	2884
Examiner	:	Albert J. Gagliardi
Applicant	:	Joseph S. Stam et al.
Appln. No.	:	10/615,317
Filing Date	:	July 8, 2003
Confirmation No.	:	9360
Docket No.	:	AUTO 218
Customer No.	:	028,167
For	:	VEHICLE VISION SYSTEM WITH HIGH DYNAMIC RANGE

Mail Stop Appeal Brief – Patents (Reply Brief)  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**TRANSMITTAL OF REPLY BRIEF IN RESPONSE TO EXAMINERS ANSWER**  
**(PATENT APPLICATION – 37 CFR §1.193(b)(1))**

1. Transmitted herewith is the REPLY BRIEF in this application, with respect to the Notice of Appeal filed on July 25, 2006.

**2. STATUS OF APPLICANT**

This application is on behalf of:

☒ other than a small entity  
☐ small entity

A Verified Statement:

☐ is attached  
☐ was already filed

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/615,317  
Page : 2

**3. FEE FOR FILING REPLY BRIEF**

There is no fee for filing a reply brief.

Reply Brief Fee Due: \$0.00

**4. EXTENSION OF TERM**

The proceedings herein are for a patent application and the provisions of 37 C.F.R. §1.136 apply.

X Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

**5. TOTAL FEE DUE**

The total fee due is:

Reply Brief fee:	<u>\$0.00</u>
Extension fee (if any):	<u>\$0.00</u>

TOTAL FEE DUE: \$00.00

**5. FEE PAYMENT**

\_\_\_\_ Attached is a check in the sum of \_\_\_\_\_

\_\_\_\_ Charge Account No. 07-1070 the sum of \_\_\_\_\_  
A duplicate of this transmittal is attached.

**6. FEE DEFICIENCY**

X If any additional extension and/or fee is required charge Account No. 07-1070.

Applicant : Joseph S. Stam et al.  
Appln. No. : 10/615,317  
Page : 2

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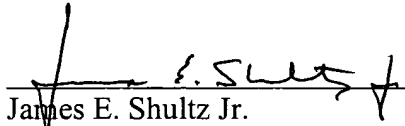
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Applicant : Joseph S. Stam et al.  
Appln. No. : 10/615,317  
Page : 2

Respectfully Submitted,

JOSEPH S. STAM ET AL.

Date: January 22, 2007

  
James E. Shultz Jr.  
Registration No. 50,511  
GENTEX CORPORATION  
600 North Centennial Street  
Zeeland, Michigan 49464  
Telephone: (616) 772-1800  
Facsimile: (616) 772-5223



Atty. Docket No. AUTO 218

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit : 2884  
Examiner : Albert J. Gagliardi  
Applicant : Joseph S. Stam et al.  
Appln. No. : 10/615,317  
Filing Date : July 8, 2003  
Confirmation No. : 9360  
For : VEHICLE VISION SYSTEM WITH HIGH DYNAMIC RANGE

Mail Stop Appeal Brief – Patents (Reply Brief)  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

REPLY BRIEF IN RESPONSE TO EXAMINER'S ANSWER (37 CFR §1.193(b)(1))

The Appellant respectfully requests that the Board of Patent Appeals and Interferences consider the reply brief to the Examiner's answer regarding the above referenced case included herewith. This reply brief to the Examiner's answer is in furtherance of the Notice of Appeal filed in the above referenced case on July 25, 2006.

If any fee is required, the Appellant asks that the fee be charged to Deposit Account No. 07-1070.

## REMARKS

The Examiner has maintained his rejection of independent claim 26 under 35 U.S.C. §112, second paragraph, and 35 U.S.C. §102(e) in the Examiner's Answer, dated January 5, 2007. In addition to the arguments in support of patentability asserted in the Appellant's Appeal Brief, dated September 25, 2006, the Appellant requests that the Board of Patent Appeals and Interferences consider the following.

The Examiner continues to allege that U.S. Patent 6,552,342, to Holz et al., teaches each and every limitation as currently recited in independent claim 26. With respect to the limitation "wherein said light source is configured to operate in synchronous relationship with acquisition of images from said image sensor, the vision system being capable of distinguishing vehicular light source from non-vehicular light sources" the Examiner asserts that, "the nature of this limitation is unclear." The Examiner then cursorily treats a portion of this limitation as purely functional. Thereby, the Examiner maintains rejection of claim 26 under 35 U.S.C. §112, second paragraph, and 35 U.S.C. §102(e).

One example of a "non-vehicular light source" discussed in the present application is "sign reflections". When "said light source is configured to operate in synchronous relationship with acquisition of images from said image sensor", as is recited in claim 26, the sign reflections (non-vehicular light sources) are distinguished from vehicular light sources; the light source is varied between the two images (i.e. configured to operate in synchronous relationship with acquisition of images from said image sensor). One of ordinary skill in the art would recognize that if a detected light source correspondingly varies, the vehicular vision system concludes that the detected

light source is a sign reflection. Conversely, if the detected light source does not correspondingly vary, the vehicular vision system concludes that the detected light source is not a sign reflection.

In a completely irrelevant context with respect to the present invention, the Holz et al. patent discloses a system for improving the visibility in vehicles. As disclosed throughout Holz et al., the improvement is utilizing a unique code for each vehicle equipped with a night vision system such that no other vehicle will interfere with another. By reviewing the portion of the description of Holz et al. found at col. 4, lines 26-65, one can conclude that this device is directed to distinguishing one vehicular light source from any other vehicular light source.

**Col. 4, lines 26-65 – U.S. Patent 6,552,342, to Holz et al.**

In the first embodiment the system, a checking of whether a glare from a laser headlight is present occurs in that the data of the video image itself is evaluated by a evaluation device 5. In the case of glare the key interval of the laser diode D is changed by a supplemental delay. This delay can be random-generated. If the glare persists, the procedure is repeated, until no glare is present. The change is supplied to the laser diode D or, as the case may be, its control electronic not described in greater detail herein.

In the second inventive embodiment according to FIG. 5, in place of the evaluation device 5 a supplemental detector 6 with a small band interference filter F1 is employed, which over time determines the laser pulses and therewith already the duty cycle of the oncoming laser headlights. In the case of glare the key interval, as already described, is changed by a supplemental delay. This change can likewise be random-generated. In the supplemental detector a free time slot can also be directly controlled. Should the glare continue, then also in this second embodiment the procedure is repeated until no glare remains any longer.

In a third embodiment, as shown in FIG. 6, a fixed key interval is established for all vehicles. The precise synchronization of all vehicles can be time-coordinated either via a radio signal, radio telephone or GPS (Global Positioning System) in a radio device indicated with 7. Therein a precision of 1 ms to 5 ms is sufficient. Using an internal quartz clock the precise key interval is maintained between the time calibrations. An electronic compass determines the direction of travel. For a set predetermined direction range--for example between North and East, East and South, South and West, West and North--a different time slot is utilized. In this manner a glare is precluded.

In a fourth embodiment multiple, for example three laser headlights with varying wavelengths--800 nm, 820 nm, 840 nm--and varying bandpass filters F for these wavelengths are utilized in a filter wheel in front of the camera. Further, an electronic compass is used for determining the direction of travel. Depending upon direction of travel, a laser with a predetermined wavelength and the associated bandpass filter of the filter wheel is employed.

There is absolutely no discussion within Holz et al. of a vehicular vision system, comprising: an image sensor and a light source, said light source is configured to emit light rays in the non-visible spectrum to illuminate objects within a scene external to a controlled vehicle beyond an exterior surface of a windshield, wherein said light source is configured to operate in synchronous relationship with acquisition of images from said image sensor, the vision system being capable of distinguishing vehicular light source from non-vehicular light sources as recited in claim 26 of the present application.

Accordingly, reversal of the rejections of these claims under 35 U.S.C. §§102, 103 and 112 is appropriate and is respectfully solicited. The Appellant, therefore, respectfully requests that the Board of Patent Appeals and Interferences issue a decision in which claims 26, 27, 32-38 and 41-46 are indicated to be allowable in light of the art of record. The Appellant additionally requests that the decision indicate support for passing this case to allowance.

Respectfully submitted,  
JOSEPH S. STAM ET AL.  
By: Gentex Corporation

January 18, 2007  
Date

James E. Shultz Jr.  
James E. Shultz Jr.  
Registration No. 50,511  
600 N. Centennial Street  
Zeeland, Michigan 49464  
616/772-1800